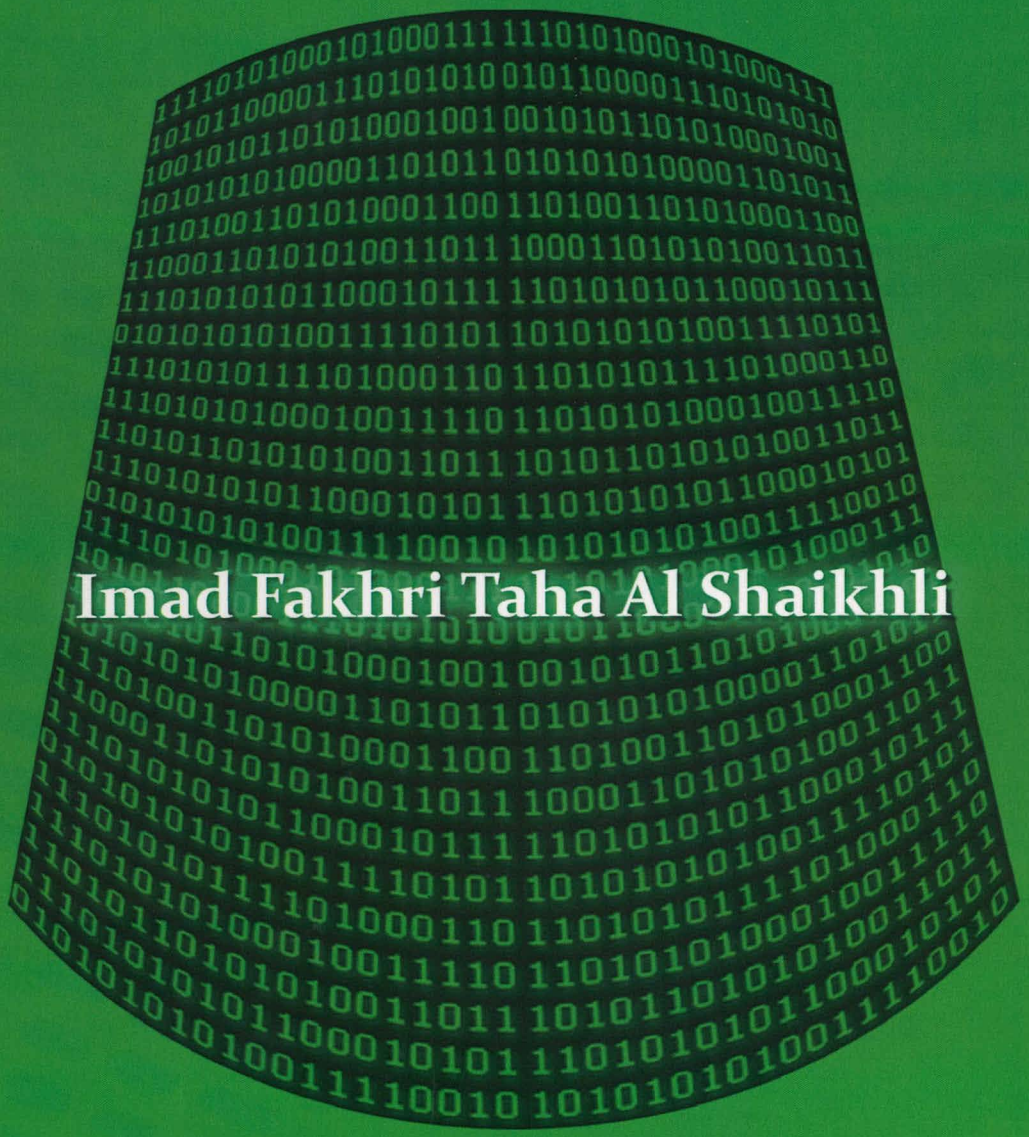
Cryptography

Past, Present and Future



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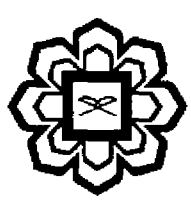

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ABSTRACT

In this article we will talk about the background of block and stream cipher and how the people were encrypt the plaintext and decrypt the cipher text using block and stream cipher. Also we will introduce into block and stream cipher individually.

BACKGROUND

Symmetric-key encryption is the method that uses same key, called secret key, for both encryption and decryption. Users exchanging data keep this key to themselves. Message encrypted with a secret key can be decrypted only with the same secret key. The algorithm used for symmetric key encryption is called secret-key algorithm. Also, secret-key algorithms are mostly used for encrypting the content of the message, so they are called content-encryption algorithms. (Blaze, M.,Diffie, W.,Rivest, R. L.,Schneier, B.,Shimomura, T., Thompson, E., &Wiener, M. (1996))

Symmetric-key encryption provides secrecy when two parties say Alice and Bob communicated. An adversary who intercepts a message should not get any significant information about its content. To set up a secure communication channel, Alice and Bob first agree on a key k. They keep their shared key k secret. Before sending a message m to Bob, Alice